

*\*This document has been released as a draft and is subject to changes\**

## **SECTION 2 - SPECIAL TERMS AND CONDITIONS**

### **2.1 PURPOSE**

Miami-Dade County is soliciting bids for an Automated Vehicle Location Tracking Devices, Software, and Service. This solicitation is being conducted on behalf of the following County departments for a turn-key web based solution: Regulatory and Economic Resources, Parks, Internal Services, Recreations and Open Spaces, Transportation and Public Works, Miami-Dade Fire Rescue and Solid Waste Management. The awarded Bidder shall provide the County with the proposed Vehicle Tracking Devices free of charge for the duration of the term and any extension or renewal terms.

### **2.2 TERM OF CONTRACT- FIVE (5) YEARS**

This contract shall commence on the first calendar day of the month succeeding approval of the contract by the Board of County Commissioners, or designee, unless otherwise stipulated in the Notice of Award Letter which is distributed by the County's Procurement Management Division, and contingent upon the completion and submittal of all required bid documents. The contract shall expire on the last day of the last month of the contract term.

### **2.3 OPTION TO RENEW FOR TWO (2) ADDITIONAL THREE (3) YEAR PERIODS**

Prior to, or upon completion, of the final term, the County shall have the option to renew this contract for two (2) additional three (3) year periods. Continuation of the contract beyond the initial period, and any option subsequently exercised, is a County prerogative, and not a right of the Bidder. This prerogative may be exercised only when such continuation is clearly in the best interest of the County.

### **2.4 METHOD OF AWARD**

Award of this contract will be made on a Group-by-Group basis to the lowest priced responsive, responsible Bidder who submits an offer on all items listed in the corresponding Group and whose offer represents the lowest price when all items are added in the aggregate for that Group. To be considered for award for a given group, the Bidder shall offer prices for all items within the given group. If a Bidder fails to submit an offer for all items within the Group, its offer for that specific Group may be rejected.

### **2.5 PRICES**

If a Bidder is awarded a contract under this solicitation, the prices proposed by the awarded Bidder shall remain fixed and firm during the term of contract. However, the awarded Bidder may offer incentive discounts to the County at any point during the term of the contract.

### **2.6 METHOD OF PAYMENT**

The County shall provide periodic payments for services rendered by the awarded Bidder. In order for the County to provide payment, the vendor shall submit a fully documented invoice that provides the basic information set forth Section 1.35 of the General Terms and Conditions.

### **2.7 ACCEPTANCE OF DEVICES/SOFTWARE BY THE COUNTY**

The Devices and Software to be provided hereunder shall be delivered to the County, and maintained if applicable to the contract, in full compliance with the specifications and requirements set forth in this contract. If a Bidder-provided

Device or Software is determined to not meet the specifications and requirements of this contract, either prior to acceptance or upon initial inspection, the item will be returned, at Bidder expense, to the Bidder. At the County's own option, the awarded Bidder shall either provide a direct replacement or provide a full credit for the returned item. The awarded Bidder shall not assess any additional charge(s) for any conforming action taken by the County under this clause.

## **2.8 WARRANTY AND MAINTENANCE REQUIREMENTS**

The Service fee shall include full coverage maintenance, including preventative maintenance, all service calls and replacement of all defective or worn Devices/parts. Warranty and maintenance services must include parts and labor, and on-site, next business day response. Any payment by the County on behalf of the goods or services received from the awarded Bidder does not constitute a waiver of these warranty provisions.

## **2.9 OMISSION FROM THE SPECIFICATIONS**

The apparent silence of this specification and any addendum regarding any details or the omission from the specification of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail, and that only materials and workmanship of first quality are to be used. All interpretations of this specification shall be made upon the basis of this contract.

## **SECTION 3 – TECHNICAL SPECIFICATIONS**

### **3.1 BACKGROUND**

This contract is being solicited for an Automated Vehicle Location Tracking Service for the following departments of Miami-Dade County:

#### **Regulatory and Economic Resources**

The Miami-Dade County Regulatory and Economic Resources Department provides a broad portfolio of services to support its mission including reviewing permit and licensing applications and conducting code enforcement activities related to compliance with applicable building, zoning, planning, environmental, platting, traffic, and industry-specific codes and regulations. RER develops countywide and industry/neighborhood-specific economic development strategies; is responsible for land use and community planning and policy; provides environmental, historic resource, and consumer protection and education, and conducts economic research.

#### **Parks, Recreation, and Open Spaces**

Miami-Dade County Parks, Recreation, and Open Spaces Department (PROS) services approximately 25 million people per year, who use County parks, attend County events, and participate in County Programs. PROS is one of the busiest and largest leisure services agencies in the United States, and is the first park and recreation agency in the State of Florida to receive the Governor's Sterling Award (2009), which recognizes organizations and businesses in Florida that have successfully achieved performance excellence within their management and operations.

#### **Transportation and Public Works**

The Transportation and Public Works Department (TPWM) provides a variety of functions and services to the residents. The majority are related to the development and maintenance of the County's infrastructure. The term infrastructure refers to the basic facilities, services and installations - in this case the roads, bridges, sidewalks, street signs, pavement markings, traffic lights, storm water drainage facilities, etc. - that are required for a community to function. TPWM also implements local and state mosquito control programs to help minimize the threat of disease. TPWM consists of 17 divisions staffed by almost 800 employees all dedicated to serving and working for the citizens of Miami-Dade County.

#### **Internal Services Department**

The Internal Services Department (ISD) provides a wide range of internal support services for the ongoing operation of County government. The Department focuses on promoting operational best practices and efficient government operations. As part of the General Government strategic area, ISD supports governmental operations by providing procurement services, facility management, design and construction management, fleet management, risk management, surplus property disposition services, capital inventory management, and small business program management and services. Additionally, ISD is engaged in real estate development and management, Americans with Disabilities Act compliance, elevator regulation, and parking services.

#### **Solid Waste Management**

The Miami-Dade County Department of Solid Waste Management (SWM) is the largest government owned integrated Solid Waste Management System in the Southeastern United States. SWM's principal responsibilities may be categorized as: (1) waste collection, (2) recycling, (3) waste transfer and disposal, and (4) regulation.

SWM provides solid waste collection and disposal services to single family residential units (including certain multi-family units such as duplexes) and a small number of commercial and multi-family accounts in the unincorporated portions of the County. It also provides solid waste collection and disposal services to the Village of Pinecrest, the City of Sunny Isles Beach, the City of Aventura, the Town of Miami Lakes, the Village of Palmetto Bay, the City of Miami Gardens and the City of Doral; trash disposal and garbage collection and disposal services to the City of Sweetwater; and it has entered into long-term interlocal agreements with 18 municipalities (including Sweetwater) to provide solid waste disposal services.

### **Water and Sewer Department**

The Water and Sewer Department is considered the largest utility in the Southeastern United States, serves over 420,000 retail water customers and 14 municipal wholesale customers within the County. The wastewater system serves approximately 336,000 retail customers and 12 wholesale customers, consisting of 11 municipal customers. It consists of three regional wastewater treatment plants, and over 1,035 sewage pump stations and nearly 6,200 miles of collection and transmission pipelines.

### **Miami-Dade Fire Rescue**

The Miami-Dade Fire Rescue Department (MDFR) protects people, property and the environment by providing responsive professional and humanitarian fire rescue services essential to public health, safety and well-being. Miami-Dade Fire Rescue Department is one of the youngest departments of its size in the country, yet one of the fastest growing. MDRF leads the nation in Fire Suppression, Emergency Medical Services, Search and Rescue and other specialized areas.

## **3.2 SCOPE OF WORK**

The awarded Bidder shall provide the County with Vehicle Location Tracking Devices, Software, and Services for the purpose of locating and tracking designated County vehicles assigned to employees. The purpose of this solicitation is to provide the County with the ability to locate and track designated County vehicles assigned to employees working in the field and will also enable the County to examine current and past locations of vehicles on specific dates and times. It is intended that the Devices and Software will provide the County with the ability to view map addresses, show the amount of time spent at each location or site, view, and monitor vehicle movement on a computer screen map as well as be capable of displaying the individual record history and providing a back-up system for record retention.

### **3.2.1 GROUP A – VARIOUS COUNTY DEPARTMENTS**

The County estimates that in excess of 3,000 vehicles in Group A may be equipped with the Devices as listed in the table below. In accordance with Section 1.9 of the General Terms and Conditions, the Bidder should not interpret the estimated quantities provided below as a firm quantity and/or dollar committed by the County:

<b>Department</b>	<b>Estimated Quantity</b>	<b>Device Description</b>
Regulatory and Economic Resources	281	General Packet Radio Service (GPRS) Modem and Global Positioning System (GPS) Receiver
Parks, Recreation, and Open Spaces	450	General Packet Radio Service (GPRS) Modem and Global Positioning System (GPS) Receiver
Transportation and Public Works	220	General Packet Radio Service (GPRS) Modem and Global Positioning System Receiver (GPS) Receiver
Solid Waste Management	650	General Packet Radio Service (GPRS) Modem and Global Positioning System Receiver (GPS) Receiver

Water and Sewer	1,365	General Packet Radio Service (GPRS) Modem and Global Positioning System Receiver (GPS) Receiver
Internal Services	99	General Packet Radio Service (GPRS) Modem and Global Positioning System Receiver (GPS) Receiver

### 3.2.2 GROUP B – MIAMI-DADE FIRE RESCUE DEPARTMENT

The County estimates that 200 vehicles in Group B may be equipped with the Devices as listed in the table below. In accordance with Section 1.9 of the General Terms and Conditions, the Bidder should not interpret the estimated quantities provided below as a firm quantity and/or dollar committed by the County:

Department	Estimated Quantity	Device Description
Miami-Dade Fire Rescue	200	General Packet Radio Service (GPRS) Modem and Global Positioning System (GPS) Receiver

### 3.3 DEVICES, SOFTWARE AND SERVICES TO BE PROVIDED

#### 3.3.1 GROUP A - DEVICES, SOFTWARE AND SERVICES TO BE PROVIDED TO VARIOUS COUNTY DEPARTMENTS

The awarded Bidder shall provide a complete replacement of Vehicle Tracking Devices and any additional new Devices required.

The following specifications are that of the Automated Vehicle Tracking Devices, Software and Services required:

##### a) Devices Requirements

- Devices shall be able to locate and track vehicles within Miami-Dade County, Palm Beach County, Broward County and Monroe County.
- Devices shall be durable and able to operate in environmental conditions such as extreme heat, moisture in the air
- Devices shall be fully compatible with multiple web browsers (not necessarily all, but multiple) e.g. MS edge, safari, chrome, firefox.
- Proprietary Firmware: All firmware with any Device, or accessory, purchased or paid by Miami-Dade County shall be the property of Miami-Dade County. Only industry standard, fully documented firmware, software, or communications protocols should be used. Special enhancements or modifications made by the awarded Bidder that will prevent Miami-Dade County from using the purchased Devices with the County's own software systems are not acceptable.

##### b) Software Requirements

- Software shall accurately locate and track vehicle +/- three meters. The Devices will operate efficiently with no outside interference (high rises, tree canopy, etc.) which may cause a false reading and impair the Software's ability to accurately track and locate the vehicles.
- Software shall interface with the historical data providing a means to digitally extract the data based on vehicle, vehicle groups, location, time frames and any combination thereof.
- Software shall have the necessary tools to allow users the functionality of retrieving, reviewing, and printing reports.
- Communication and data transfer between the County/vehicles and the awarded Bidder's systems

shall be stored and transmitted at no less than 128 bit encryption.

- Proposed Software shall be subjected to a penetration test to validate adequate security measures are in place.
- Software shall provide grouping capabilities by limiting the access to the data to the individual departments and distinguish the vehicles assigned to each team supervisor's group.
- Software shall include a function of remote diagnostics or fault notification where the system can notify if it has been tampered with.
- Software shall have the ability to:
  - Send alerts to administrators for unauthorized access attempts.
  - Provide the County with the option to block addresses of certain user-defined landmarks from appearing online or in printed reports.
  - Limit concurrent sessions.
  - Independently define normal service hours per vehicle.
  - Date and time stamped all recording events.
  - Automatically archive audit logs.
  - Provide a near (not to exceed 10 minutes from actual real time) real time service with an automatic download capability.
  - Display all times in the web based application in hours, minutes, and seconds.
  - Protect audit logs from unauthorized access.
  - Log changes to administrative functions.
  - Provide two different links: one for display to the public, and one for County's internal functions.
  - Allow each department to set up their required intervals.
  - Lock out user or group ID by date or time.
  - Provide a password database encrypted in storage at a minimum of 128 bit encryption.
  - Require automatic password expirations when initially assigned or reset and for each user to be uniquely identified by a unique user ID.
  - Configure password parameters such as password lengths, user access to expiration settings and other behaviors, enabling alphanumeric characters, etc.
  - Synchronize passwords throughout a network. Support for SSL 128 bit and higher encryption (SSL v.3 or TLS 1.0).
  - Enable automatic logoff of ID after a defined period of session inactivity, and perform subsequent re-log-on password authentication.
  - Allow for basic customization per department and per vehicle.
  - Provide an intranet interface to the County stored historical data. The interface will enable the users to query the database on all fields and export the data captured in a digital format. The data extracted will be formatted in such a way that it can be imported into applications such as MS Word / Excel and ArcGIS.
  - Capture at least eight elements of vehicular data as required by each department.
  - Keep a minimum of six months of historical data at all times or as requested by each department. Data history must be transferred to the County every six months.
  - Allow County users the option to query and export the data captured to external applications such as MS Word/Excel/ArcGIS.
  - Generate random screen and printed reports on vehicle location as well as groups of vehicle locations; showing the closest addresses or intersection along the street as well as the vehicle status (stopped, moving), speed, mileage, vehicle number, driver's name, coordinates, and time duration stopped at locations.

- Provide the County with statistical reporting on tracking parameters and alerts when required.
- Develop a data maintenance procedure that will update street and address data in a timely manner as determined by County Departments.
- Provide for a thin client, browser-based user access to the vehicle tracking solution. This solution must provide County staff with a means of viewing the location of all vehicles on a map.
- Provide public access to a map on screen on web-site: The computer screen will show a picture and vehicle number, together with a map. The map will show the inspector's vehicle location. The on screen map will start at 7:00 AM and will cease after the last task/work made by the driver.
- Allow the County to be able to control the driver's information, driver's route, and work information when the maps are displayed to the public.
- Provide user interface to allow County personnel to change and administer all the parameters associated with vehicle tracking. The initial input of all parameters needed to start up the service will be provided and installed and tested by the awarded Bidder.
- Log activities performed by specific user ID or time of day, and to date stamp all activities.
- Identify and log all subsequent access points to ensure accountability is maintained throughout session.
- Provide definable "exclusion zones" to protect the residences of County employees.
- Have a centralized administration, user authorization, registration and termination.
- To set an unsuccessful access attempt limit and suspend IDs after reaching the unsuccessful access threshold.
- Encrypt transmitted data and authentication information over internal and external networks.
- Provide alerts and alert reports via or electronic mail (e-mail) to the individual departments at no additional charge, when a vehicle is not in compliance with County rules. To include; moving during hours of non-operation (non-working hours), exceeding a pre-defined speed limit, arriving at a prohibited landmark address, and leaving the vehicle's pre-defined zone of operation.
- No advertisements will be allowed on public access links, for the awarded Bidder or any other third party associated with the proposed web based Software or Service.
- County shall control the map's availability to the public; however, the Service provider controls the vehicle movement on the map by displaying addresses, when the vehicle ignition is engaged and disengaged, and displaying other information, like real time of vehicle location, map address location, date, etc.
- Awarded Bidder shall use the County's address and street GIS layers as the source files for all address functions. Addresses will be stored using the County's address standards attached as Appendix A.
- Data stored in device shall automatically reset before the next day service begins.
- Historical data shall be normalized and contain the following fields: vehicle location (x, y coordinates), closest address or intersection along the street, status as to whether the vehicle is stopped or moving, the speed that the vehicle is traveling, the mileage between the current position and the last reported location, vehicle number, driver's name, and time duration at stopped locations.
- Software shall also provide mileage records on the vehicles, and the capability of mileage alert settings by the County for routine services like change of oil, and other services.
- Bidder will provide two different links: one for display to the public, and one for the County's internal functions.

**c) Service Requirements**

- Awarded Bidder shall provide:

- An online web based hosted application that is to be utilized by the County.
- A guarantee of service up-time at a minimum Monday through Friday from 8:00 a.m. to 6:00 p.m.
- Same day service to correct defective readings or interferences that may be experienced during work hours at no charge to the County.
- Extended service hours if operationally required by the County at no additional charge to the County.
- Awarded Bidder shall submit the results of an annual SAS 70 type II, or similar, audit performed at the Bidder's expense.

### 3.3.2 GROUP B - DEVICES, SOFTWARE AND SERVICES TO BE PROVIDED TO MDFR ONLY

In addition to the Devices, Software and Service requirements listed in Section 3.3.1, the Miami-Dade Fire Rescue Department (MDFR) requires the following:

- System shall have apps for mobile devices both IOS and Android.
- Device shall connect to vehicle's Engine Control Module and gather mileage, speed and other diagnostic information.
- System shall be capable of monitoring additional sensors such as seatbelt use, warning lights use, pump in operation, etc.
- System shall be capable of providing alerts to such as speed, leave geo-fence, enter geo-fence, PM due, PM overdue.
- Capability of sending alerts to multiple contacts.
- System permissions shall be role based so that different levels of access can be given to different levels of supervision and/or users.
- System shall allow vehicles to be placed in multiple groups e.g. vehicle can be part of code enforcement group so it can be listed when a sort by that group is performed but also belong to the life safety supervisors group and the fire prevention group.
- System shall show vehicle tracking information for 6 months and then download information to MDFR.
- System shall provide real time vehicle tracking and status data e.g. ignition on, vehicle moving, ignition off, direction of travel and speed.
- System map shall display from Key Largo, all of Miami-Dade County, Broward County and eastern edge of Collier County.
- System shall be capable of creating user defined geo-fences, either a specific radius around a landmark, a user defined polygon or a shape file.
- System shall allow user defined alerts for each geo-fence.
- System shall support both canned and ad-hoc reporting. Ad-hoc reports include reports for a specific vehicle for a date range, a group of vehicle for a date range, group of status within a date range, etc.
- System shall support tabular reports, map based reports and "video-replay" reports. All reports must be exportable, tabular reports as an .CSV, or excel spreadsheet and as a PDF; Map based reports must be exportable as a PDF and "video-replay" as an MPEG-4/H.264
- Awarded Bidder shall provide the option of training MDFR communications personnel (at the hourly rate provided in the Price Schedule) in the installation and removal of all equipment.



### **3.5 SYSTEM COMPATIBILITY**

The awarded Bidder has the option of using its own contract for subscriber service or accessing the Miami-Dade County current contract for data wireless services with AT&T. All Devices and accessories to be acquired by Miami-Dade County shall be compatible with the services provided by AT&T and other major wireless service providers. The wireless service is to be provided by the Automated Vehicle Location Tracking Devices, Software, and Service provider. The awarded Bidder will provide full service to the County, which will also include the charges for the wireless service.

The County utilizes ArcGIS products developed by ESRI (Environmental Systems Research Institute). The ArcGIS desktop environment is served to County users via CITRIX technology. GIS data is stored and accessed through a centralized data repository hosted on Oracle and SQL Server and accessed via ArcSDE. Additionally much of the data is available via the GIS Open data site. The County has a very robust ArcGIS Server technology which hosts intranet/internet web applications, image services, map services, geoprocessing services, web services, and feature services all available via the windows platform. The County's cloud GIS, hosted by ArcGIS OnLine, is also fully developed and available for GIS integration.

### **3.5 OPTIONAL INSTALLATION SERVICES**

The County, in its sole discretion, may request installation services from the awarded Bidder at the Installation Rate provided in Form A – Price Schedule. In the event that such services are requested, the awarded Bidder agrees to install the Automated Vehicle Tracking Devices, at the applicable site(s) provided by the County on the Work Order. Work may occur during the hours of 8:00 a.m. to 6:00 p.m. Awarded Bidder shall diligently pursue and complete such installation without interruption, so that such Automated Vehicle Tracking Device is in good working order and ready for immediate use.

The complete installation shall consist of the Devices specified in Section 3.0 and all other components necessary for their proper operation, including any items not identified in these specifications which are necessary (i.e., power supplies, connectors, brackets and mounting equipment, devices junction boxes, etc.)

The awarded Bidder will provide next day service for the installation of new Automated Vehicle Tracking Devices (and removal of any defective Automated Vehicle Tracking Device(s) and/or accessories, when required) at no additional charge to the County.

In the event that the County requests installation services, the awarded Bidder shall perform the following tasks:

- a) Remove all previously installed Vehicle Tracking Devices, mounts and cabling.
- b) Ensure all the necessary wiring for the proper operation of the Vehicle Tracking Devices is provided at the time of installation.
- c) The tracking device antenna shall be installed in a non-visible area of the vehicle.
- d) Provide all equipment as described in this solicitation.
- e) Perform entire installation (under the dashboard on the passenger side of the County vehicles) and configuration of the Vehicle Tracking Devices.

### **3.6 OPTIONAL TRAINING SERVICES**

The County, in its sole discretion, may request training services from the awarded Bidder. In the event that such services are requested, the awarded Bidder agrees to train County employees at the Miami-Dade County location(s) designated by each of the participating County departments identified within this solicitation at the hourly rate provided in Form A – Price Schedule.

Technical manuals and associated training materials shall be provided for all applications and maintenance operations at every training session, regardless of the minimum number of training hours provided.

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